COMMONWEALTH of VIRGINIA

IMPLEMENTATION PLAN FOR NUTRIENT MANAGEMENT PLANS AND LIVESTOCK STREAM EXCLUSION ASSISTANCE IN VIRGINIA'S CHESAPEAKE BAY WATERSHED

APRIL 2021

Department of Conservation and Recreation Division of Soil and Water Conservation 600 East Main Street, 24th Floor Richmond, VA 23219 (804) 786-2064



NEW LEGISLATIVE AUTHORITY AND BACKSTOP REQUIREMENTS

In 2019, Virginia completed its Phase 3 Chesapeake Bay Total Maximum Daily Load Implementation Plan (WIP). Chapter 7 of the WIP has 50 policy initiatives, including 21 initiatives for agriculture. These are to be implemented in order to achieve the nutrient reductions needed to restore all designated uses of water in both the main stem of Chesapeake Bay and its tributary rivers in Virginia. Significant progress is being made on almost all of these 21 agricultural initiatives, as documented in the Chesapeake Bay WIP milestone progress report for 2020.

Policy Initiative Number 26 "Increase Nutrient Management Plan Implementation on Agricultural Lands," and Number 27 "Livestock Stream Exclusion," led to Virginia's 2020 General Assembly enacting legislation §62.1-44.123 (HB1422/SB704) to require two "backstops" for the agricultural sector, i.e. regulatory actions that will take effect in 2026 if the required implementation is not met by December 31, 2025.

Specifically, the legislative backstops are 1) "Any operator of 50 or more acres of Chesapeake Bay cropland shall maintain and implement an approved nutrient management plan. Also, as required by this legislation, on December 16, 2020, the Board adopted guidance establishing a method for identifying perennial streams that does not require field verification. Further, in the spring of 2021 the Board will consider a portable stream fencing practice recommendation from the Agricultural Best Management Practice Technical Advisory Committee for inclusion in the Fiscal Year 2022 Virginia Agricultural Best Management Practice Cost-Share Program.

Pursuant to the legislation, "the Secretary of Natural Resources and the Secretary of Agriculture shall convene a stakeholder advisory group (the Group) to review annual progress toward the implementation of the Commonwealth's agricultural commitments in the Chesapeake Bay Total Maximum Daily Load Phase III Watershed Implementation Plan. The Group shall (i) develop a process to assist any operator of 50 or more acres of Chesapeake Bay cropland in developing a nutrient management plan that meets the requirements of the goals to be achieved by the target date and (ii) develop a plan for the stream exclusion program in the Chesapeake Bay watershed. Such plans and progress reports shall include identification of priority regions, operators affected within each region, initiatives to enhance progress, an accounting of funding received toward the agricultural commitments, shortfalls remaining, and the consequences of such funding shortfalls.

The Group shall make recommendations to the Governor regarding necessary revisions to Chapter 3.8 (§ 62.1-44.119 et seq.) of Title 62.1 of the Code of Virginia, as created by this act, to ensure that the Commonwealth's commitments are achieved by December 31, 2025. The Group shall include representatives from the Department of Conservation and Recreation, Soil and Water Conservation Districts, the Virginia Farm Bureau Federation, the Virginia Agribusiness Council, the Chesapeake Bay Commission, the Chesapeake Bay Foundation, the Virginia Cooperative Extension, the Virginia Cattlemen's Association, the Virginia Association of the Commissioners of the Revenue, and the Virginia Association of Counties. The Group shall also include two legislative members, one each from the Senate and the House of Delegates. Such legislative members shall be members of the Virginia delegation of the Chesapeake Bay Commission."

Members of the stakeholder advisory group include:

The Honorable Lynwood Lewis, Senate of Virginia

The Honorable Nancy Guy, Virginia House of Delegates

Director Clyde Cristman, Department of Conservation and Recreation

Kendall Tyree, Virginia Association of Soil and Water Conservation Districts

Martha Moore, Virginia Farm Bureau

Kyle Shreve, Virginia Agribusiness Council

Adrienne Kotula, Chesapeake Bay Commission

Peggy Sanner, Chesapeake Bay Foundation

Ed Jones, Virginia Cooperative Extension

James Riddell, Virginia Cattleman's Association

James Timberlake, Virginia Association of the Commissioners of the Revenue

Chris McDonald, Virginia Association of Counties

Anna Killius, James River Association

Pat Calvert. Virginia Conservation Network

Phillip Musegaas, Potomac Riverkeeper Network

Marc Frondor, Shenandoah Riverkeeper

The Group met on August 17th and December 9th, 2020. They did not make recommendations regarding any necessary revisions to Chapter 3.8 (§ 62.1-44.119 et seq.) of Title 62.1 of the Code of Virginia to ensure that the Commonwealth's commitments are achieved by December 31, 2025.

PLAN FOR THE STREAM EXCLUSION PROGRAM IN THE CHESAPEAKE BAY WATERSHED

Financial Incentives

In December 2012, the Virginia Department of Conservation and Recreation (DCR) introduced 100% cost reimbursement for livestock stream exclusion best management practices when the Virginia Enhanced Conservation Initiative (VECI) was launched with a budget of \$3 million. This was expanded from the Chesapeake Bay watershed into a statewide effort via a promise by the Commonwealth to provide 100% cost reimbursement for any livestock stream exclusion cost share application received by a Soil and Water Conservation District by June 2015. This obligation for 100% cost reimbursement was fulfilled in 2019 for a total cost of over \$95 million statewide for more than 2,350 stream exclusion practices, resulting in almost 9.5 million linear feet of stream fencing. Over half of these stream exclusion practices, 1,270, were in Virginia's Chesapeake Bay watershed. This subset excluded nearly 66,000 animals from stream, rivers, and other water bodies within the watershed (see Appendix A). Additional stream miles and animals have been excluded due to U.S. Department of Agriculture conservation programs, however, much of these data are not available to state agencies and are not included in this report.

The 100% cost reimbursement initiative for every livestock stream exclusion practice has ended. However, as a result of a thorough review of Virginia's Agricultural Cost Share (VACS) Program conducted in 2018 – 2019 by DCR and the Agricultural Best Management Practice

Technical Advisory Committee, several new options for stream exclusion have been enacted. There are 14 stream exclusion practices in the VACS program, which vary from 10-foot setbacks from stream banks, to over 50-foot wide grass and forested stream buffers. Cost reimbursement for these options vary from 55 - 100%, depending on the width of the setback/buffer along perennial waters and whether the agricultural producer commits to maintain these practices for 5 to 15 years. Some of these practices also include a land rental payment, previously limited to only federally funded stream buffer practices.

With these changes, signup for state funded stream exclusion practices in fiscal years 2019 and 2020 was significantly increased over signup from the prior three years. This increased signup for stream exclusion practices has continued in fiscal year 2021. Record state funding for agricultural BMP cost share also contributed to the increased signup.

Small Farmer Outreach

The average size herd for cattle ranchers that participated in Virginia's 100% cost reimbursement incentives for livestock stream exclusion through 2020 has been approximately 35 head of cattle. However, the Agricultural Census reveals that a high percentage of cattle operations throughout Virginia have small herds. As a result, DCR will initiate for fiscal year 2022 a new initiative with approval from the Board for cattle operations with 20 to 35 head of cattle, the "Small Herd Initiative." This initiative will be for a specific list of Chesapeake Bay counties with significant numbers of cattle operations within the targeted size range. It will be funded by VACS funds, designated for the Chesapeake Bay watershed, that are either unobligated or returned to DCR by Soil and Water Conservation Districts, e.g. from cancelled VACS contracts. Qualified participants will receive a maximum of \$25,000 to install stream exclusion practices.

These awards will not count towards the annual VACS participant funding cap. Promotional materials will be produced and distributed to every Soil and Water Conservation District within Virginia's Chesapeake Bay watershed, as well as to DCRs other partners, including the Small Farm Outreach Program at Virginia State University (VSU). This program at VSU has staff that work one-on-one with small farmers and ranchers throughout Virginia.

Documenting Stream Exclusion Practices

Virginia distributed a survey of farmers in its Chesapeake Bay watershed to document voluntary efforts by farmers to exclude livestock from streams and several other types of best management practices (BMPs) installed without public financial assistance. This data will be combined with existing data sources, de-duplicated, aggregated to protect farmer privacy, and reported for nutrient reduction credit towards year 2025 WIP targets.

A report on the farmer survey will be released in late 2021. DCR best management practice data for the prior state fiscal year (July-June) is aggregated to the county level and submitted to the Virginia Department of Environmental Quality for Chesapeake Bay milestone progress and the state's Nonpoint Source Management Plan, by November 1 annually. Progress documented through the programs described above will be included.

PLAN TO ASSIST ANY OPERATOR OF 50 OR MORE ACRES OF CHESAPEAKE BAY CROPLAND DEVELOP A NUTRIENT MANAGEMENT PLAN

Targeting Direct Pay for NMPs

Nutrient management plan coverage on cropland in Virginia's Chesapeake Bay watershed improved from roughly 50 percent to 61 percent in 2020 (see Appendix B). This significant progress was due to both record VACS funding in 2020, and targeting by DCR of 37 localities that had less than 10% of their agricultural land under an active nutrient management plan (NMP) in 2019.

To address targeted localities, DCR resurrected the NMP Direct Pay Program. "Direct Pay" enables private sector NMP writers to submit NMPs for farms in targeted counties directly to DCR for payment. Direct Pay also enables plan writers to avoid waiting for payment from third parties. All Direct Pay agricultural NMPs must be written for three years, and participating plan writers are also compensated to verify implementation of the Direct Pay NMPs that they have developed. The Direct Pay concept has been so well received that DCR expanded it to golf course NMPs as well as to Resource Management Plans in 2020.

Federal Funding

EPA awarded a supplemental Chesapeake Bay grant to DCR in 2020 for NMP Direct Pay plans in nine of the 37 targeted localities. The progress achieved in 2020, plus greater focus on cropland in Virginia's Chesapeake Bay watershed lacking an NMP, versus all agricultural land, will enable revisions to the list of targeted localities in 2021 (state fiscal year 2022) and periodically thereafter.

Whole Farm Approach

For another strategy to promote NMPs, DCR piloted with Three Rivers Soil and Water Conservation District in 2019 through the present a Whole Farm Approach (WFA). WFA is currently targeted for crop and management hay operations. It requires a (core or enhanced) NMP and any of several cover crop options. Farmers support WFA because they can submit a single VACS application for several practices at once and be guaranteed funding assistance provided they agree to implement practices on their entire farm. WFA increased coverage in conservation practices in Three Rivers Soil and Water Conservation District from approximately 75% to 95% in its initial year of availability.

In addition, not only has EPA awarded a supplemental Chesapeake Bay grant for NMP Direct Pay in several targeted localities, but EPA has also offered \$1.1 million in targeted supplemental grant funding, via their "Most Effective Basins (MEB)" program. DCR is currently awaiting receipt of the MEB grant for expansion of the WFA onto the Chesapeake Bay drainage portion of the Eastern Shore of Virginia. The MEB funding will also be used to address farm erosion in the Great Wicomico watershed on the Northern Neck.

Further, DCR is also working with Thomas Jefferson Soil and Water Conservation District, by submitting a grant application to the U.S. Department of Agriculture's Regional Conservation Partnership Program for WFA, for both cropland, and for the first time, pastureland.

WFA is reported as each of its individual best management practices with DCR's annual submission of aggregated data to DEQ for Chesapeake Bay milestone progress and the state's Nonpoint Source Management Plan, annually by November 1.

FUNDING LIVESTOCK STREAM EXCLUSION AND NMPS AND MANY OTHER BEST MANAGEMENT PRACTICES

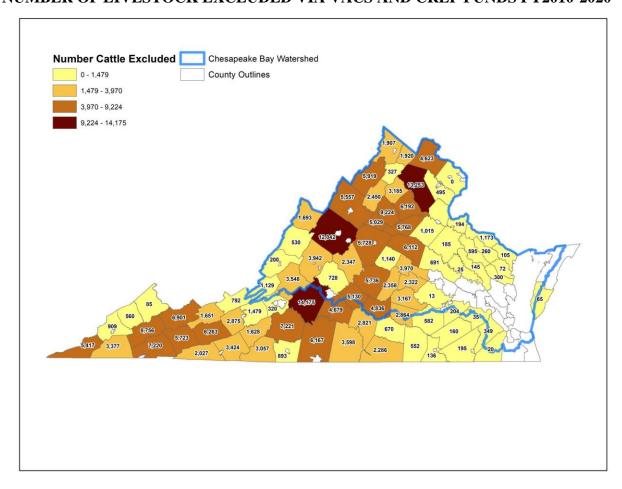
Understanding and addressing financial incentive needs of Virginia farmers who are implementing livestock stream exclusion practices and NMPs is also necessary to meet the required implementation by December 31, 2025. Virginia law (§10.1-2128.1.C) requires preparation of an Agricultural Needs Assessment prior to each state budget biennium, for each year of the upcoming biennium. The "Needs Assessment" is included in the annual Chesapeake Bay and Virginia Waters Cleanup Plan submitted by the Secretary of Natural Resources to the Governor and Virginia General Assembly, and consequently it has been updated annually. The Needs Assessment informs the Administration and is considered during the development of budget bill every year.

The Needs Assessment projects a fiscal year 2022 need in the Chesapeake Bay watershed for almost \$74 million in agricultural BMP cost share, plus \$9.6 million in technical assistance. Another \$31.6 million in cost share, plus \$4.4 million in technical assistance needs is projected for areas outside of Virginia's Chesapeake Bay watershed.

The proposed 2022 state budget provides more than the \$65 million for agriculture BMP cost share assistance for farmers. The 2022 state budget also includes \$4.55 million in technical assistance for Soil and Water Conservation Districts, identified as the minimum amount of funding for staff and District operations, to implement a \$35 million cost share program. The budget also includes the annual investment in cost share and technical assistance through the recordation fee as well as \$1 million to support poultry litter transport, nutrient management plans, and resource management plans, \$250,000 for DCR and Virginia State University Small Farm Outreach Program, and \$500,000 for the Commonwealth's match for participation in the Conservation Reserve Enhancement Program.

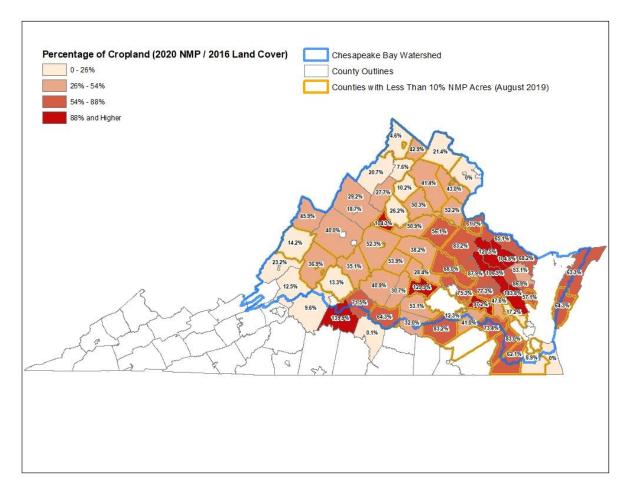
APPENDIX A

NUMBER OF LIVESTOCK EXCLUDED VIA VACS AND CREP FUNDS FY2010-2020



APPENDIX B

FY2020 NMP COVERAGE ON VIRGINIA'S CHESAPEAKE BAY CROPLAND*



^{*} FY2020 coverage can exceed 100% of 2016 land use.